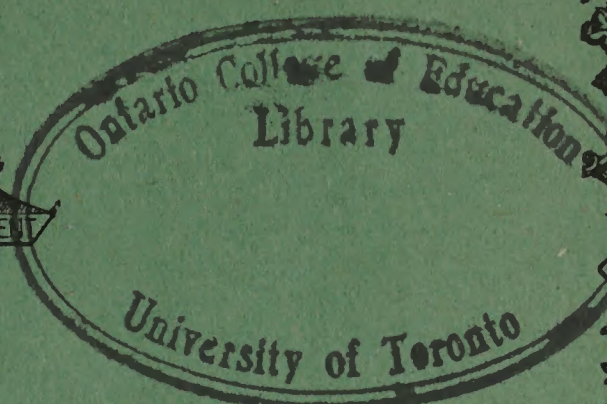




WITHDRAWN

PROVINCE OF ONTARIO.

COLLEGIATE INSTITUTES

AND

HIGH SCHOOLS.

Intermediate Examination Papers.

JULY 1877.

(No. 1.)

Education Department, Ontario.

JULY EXAMINATIONS, 1877.

SECOND CLASS TEACHERS AND INTERMEDIATE.

ENGLISH LITERATURE.

TIME—TWO HOURS AND A QUARTER.

Examiner: J. M. BUCHAN, M.A.

1. Carlyle says that Scott employed great powers in procuring the means to gratify an essentially vulgar ambition. To what does this criticism refer? Do you concur in it? Give reasons for your answer.

2. Name the author of each of the following works:—The Ancient Mariner, Rasselas, Woodstock, Thalaba the Destroyer, Childe Harold's Pilgrimage, the Bard, Hyperion, the Excursion, and Pamela.

3. Tell the story of the ballad of Alice Brand, quoting any parts of it which you remember. In what part of the Lady of the Lake does it occur?

[OVER.]

4 " The Monarch saw the gambols flag,
 And bade let loose a gallant stag,
 Whose pride, the holiday to crown,
 Two favourite greyhounds should pull down,
 That venison free and Bordeaux wine 5.
 Might serve the archery to dine.
 But Lufra,—whom from Douglas' side
 Nor bribe nor threat could e'er divide,
 The fleetest hound in all the North,—
 Brave Lufra saw, and darted forth. 10.
 She left the royal hounds midway,
 And dashing on the antlered prey,
 Sunk her sharp muzzle in his flank,
 And deep the flowing life-blood drank.
 The King's stout huntsman saw the sport 15.
 By strange intruder broken short,
 Came up, and with his leash unbound,
 In anger struck the noble hound.
 ——The Douglas had endured that morn,
 The King's cold look, the nobles' scorn, 20.
 And last, and worst to spirit proud,
 Had borne the pity of the crowd ;
 But Lufra had been fondly bred,
 To share his board, to watch his bed,
 And oft would Ellen, Lufra's neck, 25.
 In maiden glee, with garlands deck:
 They were such playmates, that with name
 Of Lufra, Ellen's image came.
 His stifled wrath is brimming high,
 In darkened brow and flashing eye ; 30.
 As waves before the bark divide,
 The crowd gave way before his stride ;
 Needs but a buffet and no more,
 The groom lies senseless in his gore,
 Such blow no other hand could deal, 35.
 Though gauntleted in glove of steel."

- (i.) What do you consider to be the fine strokes in this passage?
- (ii.) At what juncture does this incident occur ?
- (iii.) Give the name of the monarch, and that of this Douglas.
 Where is Bordeaux?

(iv.) Scan l. 5.

(v.) For what is 'archery' used in l. 6? Give the meaning of 'leash' in l. 17.

(vi.) Give the grammatical relations of the words in l. 33.

(vii.) Tell what you know about the Douglas family.

5. State your views as to the points of difference between the men of the Lady of the Lake and the actual men of the time of James V.

6. "Far from the madding crowd's ignoble strife,
Their sober wishes never learned to stray;
Along the cool sequestered vale of life
They kept the noiseless tenor of their way.

Yet ev'n these bones from insult to protect
Some frail memorial still, erected nigh,
With uncouth rhimes and shapeless sculpture deck'd,
Implores the passing tribute of a sigh."

—Gray's *Elegy*, Ll. 73-80.

(i.) Give the grammatical relation of 'far' l. 73; and 'still,' l. 78.

(ii.) Explain the meaning of 'madding,' l. 73; and 'vale of life,' l. 75. For what does the expression 'these bones,' l. 77, stand?

(iii.) Give the derivation of 'uncouth.' Explain how 'rhyme' came to be spelt with an *h* and a *y*.

(iv.) Why is the final *d* in 'deck'd' sounded like *t*? Give similar instances.

7. Quote or refer to passages in the *Elegy* and the *Lady of the Lake* that show the points of view from which persons in low station are regarded in these poems. Is the perusal of them likely to inspire respect or disdain for the humble? Would it be correct to infer that the sentiments on this subject expressed in the poems are in each case the sentiments of the authors? Give reasons for your answers.

8. State briefly the leading thoughts of the *Elegy*.

(No. 2.)

Education Department, Ontario.

JULY ENAMINATIONS, 1877.

SECOND CLASS TEACHERS AND INTERMEDIATE.

ENGLISH GRAMMAR.

TIME—THREE HOURS.

Examiner: J. M. BUCHAN, M.A.

1. MALET.—Harold, I am thy friend, one life with thee,
And even as I should bless thee saving mine,
I thank thee now for having saved thyself.
HAROLD.—For having lost myself to save myself,
Said 'ay' when I meant 'no,' lied like a lad
That dreads the pendent scourge, said 'ay' for 'no'!
Ay! No!—he hath not bound me by an oath—
Is 'ay' an oath? is 'ay' strong as an oath?
Or is it the same sin to break my word
As break mine oath? He called my word my bond!
He is a liar who knows I am a liar,
And makes believe that he believes my word—
The curse be on his head—not bounden—no.

TENNYSON.—*Harold, Act ii., Sc. 2.*

(i.) Divide Harold's speech into propositions, state their kind and connection, and fully analyse the first three and the last three.

(ii.) Parse "life," "even," "saving," and "mine," in Malet's speech; and "word," "bond," "believe," and "be," in the last four lines of Harold's speech.

(iii.) Scan the first line of the extract, naming the metre.

(iv.) Explain the derivation of "save," "mean," "pendent," and "crime."

[OVER.]

2. Parse the italicized words in the following lines :

“ I *had liefer* that the fish *had swallowed* me
Like Jonah than *have known* that there were such devils.”

TENNYSON.—*Harold*, Act ii., Sc. 1.

“ That knowledge made him *all the carefuller*.”

TENNYSON.—*Harold*, Act iii., Sc. 1.

3. Distinguish between—

The European and African races.

and

The European and the African races.

He made a better soldier than poet

and

He made a better soldier than a poet.

The remembrance of friends dead and alive.

The remembrance of dead and alive friends.

4. Point out the ambiguity in

The red white and blue flags.

Re-write the following sentence so as to make the meaning clear :—

“ Men look with an evil eye upon the good that is in others ; and think that their reputation obscures them, and that their commendable qualities do stand in their light ; and therefore they do what they can to cast a cloud over them, that the bright shining of their virtues may not obscure them.”—*Tillotson*.

5. “ In ‘ The first king of Rome,’ ‘ first ’ and ‘ of Rome ’ are not co-ordinate adjuncts.”

Explain what is meant.

6. Criticise

“ The Megarean sect was founded by Euclid, not the mathematician, and were the happy inventors of logical syllogism, or the art of quibbling.”—*Tytler*.

“ There are a sort of men whose visages
Do cream and mantle like a standing pond.”—*Shakespeare*.

“ A laggard in love and a dastard in war,
Was to wed the fair Ellen of brave Lochinvar.”—*Scott*.

“ Johnson’s Lives are being reprinted.”

“ The captain with his men were taken prisoners.”

“ Pompey as well as Cæsar were great men.”

“ Sand and salt and a mass of iron are easier to bear than a man without understanding.”

7. Give rules for the placing of adverbs and adverbial adjuncts. Illustrate the importance of placing words properly by the example of "only."

8. Punctuate the following sentences, and arrange the words in iambic pentameters, putting capitals in the proper places:—

it is indeed a most desired event if when a parent from a parents heart lifts from this earth to the great father of all a prayer both when he lays him down to sleep and when he rises up from dreaming it one supplication one desire one hope that he would grant a wish for his two sons even all that he demands in their regard and suddenly beyond his dearest hope it is accomplished he should then rejoice and call his friends and kinsmen to a feast and task their love to grace his merriment then honour me thus far for i am he

SHELLEY.—*The Cenci*, Act i., Sc. 3.

9. State briefly the principal differences between English and its parent Anglo-Saxon.

1. The first part of the paper is devoted to a general
consideration of the principles of the theory of the
relativity of simultaneity.

2. In the second part the theory of the relativity of
simultaneity is applied to the theory of the
relativity of motion.

3. In the third part a more detailed account is given of
the theory of the relativity of motion, and it is shown
that the theory of the relativity of motion is a
special case of the theory of the relativity of
simultaneity. It is also shown that the theory of
the relativity of motion is a special case of the
theory of the relativity of simultaneity.

4. In the fourth part the theory of the relativity of
simultaneity is applied to the theory of the
relativity of motion.

5. In the fifth part the theory of the relativity of
simultaneity is applied to the theory of the
relativity of motion.

6. In the sixth part the theory of the relativity of
simultaneity is applied to the theory of the
relativity of motion.

7. In the seventh part the theory of the relativity of
simultaneity is applied to the theory of the
relativity of motion.

8. In the eighth part the theory of the relativity of
simultaneity is applied to the theory of the
relativity of motion.

9. In the ninth part the theory of the relativity of
simultaneity is applied to the theory of the
relativity of motion.

10. In the tenth part the theory of the relativity of
simultaneity is applied to the theory of the
relativity of motion.

11. In the eleventh part the theory of the relativity of
simultaneity is applied to the theory of the
relativity of motion.

12. In the twelfth part the theory of the relativity of
simultaneity is applied to the theory of the
relativity of motion.

13. In the thirteenth part the theory of the relativity of
simultaneity is applied to the theory of the
relativity of motion.

14. In the fourteenth part the theory of the relativity of
simultaneity is applied to the theory of the
relativity of motion.

(No. 3.)

Education Department, Ontario.

JULY EXAMINATIONS, 1877.

SECOND CLASS TEACHERS AND INTERMEDIATE.

GEOGRAPHY.

TIME—TWO HOURS.

Examiner: JAMES HUGHES.

1. Describe the river systems of South America.
2. Draw an outline map of the chain of lakes between Canada and the United States, naming their connections; and locate accurately the following places:—Sarnia, Milwaukee, Oswego, Collingwood, Chicago, Kincardine, Cleveland, Detroit, Goderich, Thunder Bay, Windsor, Toledo, Duluth, Owen Sound, Silver Islet and Port Colborne.
3. Where and what are Batavia, Maggiore, Aden, Otranto, Tananarivo, Bulgaria, Natal, Negropont, Malaga, Gothland, Sydney, Funen, Pisa, Father Point, Cagliari, Yenikale, Aspinwall, Melbourne, Etna and Fontenoy.
4. Give the form of government, religion, and chief exports of the following countries:—Switzerland, Hindostan, Portugal, Buenos Ayres, Turkey, Persia, China, Brazil, Nubia and Japan.
5. Describe land and sea breezes, and explain their causes.
6. If the earth's axis were parallel with the plane of its orbit—*(a.)* What changes would be made in climate? *(b.)* Where would the Tropics be situated?
7. *(a.)* Why do we have high tides on opposite sides of the earth at the same time? *(b.)* Why do we not have two tides in 24 hours?

(No. 4.)

Education Department, Ontario.

JULY EXAMINATIONS, 1877.

SECOND CLASS TEACHERS AND INTERMEDIATE.

This Paper is not to be seen by the Candidates.

DICTATION.

TIME—ONE HALF HOUR.

Examiner : GEORGE W. ROSS.

Page 244, 5th Reader. From "O Faith!" to the end of selection.

READING.

See page 334, 5th Reader, from the top of the page to "Foot-print."

(No. 5.)

Education Department, Ontario.

JULY EXAMINATIONS, 1877.

SECOND CLASS TEACHERS AND INTERMEDIATE.

ARITHMETIC.

TIME—THREE HOURS.

Examiner—J. A. McLELLAN, LL.D.

1. Prove the rule for reducing a mixed circulating demand to an equivalent vulgar fraction.

Find *accurately* what fraction $\frac{5}{8}$ of $(\frac{7}{9} - .512)$ of $3.6\frac{77}{123}$ ac., is of 2.662601 acres.

2. Shew how to find the L. C. M. of two or more numbers.

Find the L. C. M. of 483 bushels, 472 bushels 2 pecks ; 258 bushels, 3 pecks.

3. A merchant buys flannel at 32 cents per yard ; at what profit per cent. must he sell it in order that the money he receives for 220 yards, may be equal to his gain on \$480 of outlay ?

4. Three watches hang side by side, and all show 12 o'clock at the time of observation ; the first is known to gain 10 minutes, and the second to lose 10 minutes in 12 hours, while the third keeps accurate time. When will all the *minute* hands be next at 12 together ?

5. How many ounces of coinage gold are equal in value to 112 ounces of coinage silver, 1869 sovereigns weighing 40lb troy, and 66 shillings weighing 1lb. troy ?

[OVER.]

6. Distinguish between bank discount and true discount? If the simple interest on a sum of money for a given time and rate is $\frac{1}{n}$ of the sum itself, show that the true discount is $\frac{1}{n+1}$ of that sum?

7. Reckoning commercial discount at 5% a person would receive \$44.52 less than the nominal value of a note which has a year to run; what should he receive for the note, if true discount only were deducted?

8. What must a person have invested in Bank of Commerce Stock at 120, and paying 4% half yearly dividends, if a transfer of 65% of his capital to Dominion Bank Stock at 130, and paying $4\frac{1}{2}$ % half-yearly dividends, makes a difference of \$5 in his semi-annual income?

9. A merchant in Montreal, drew on Hamburg for 6000 guilders, at \$.415; how much more would he have received if he had ordered remittance through London to Montreal, exchange at Hamburg on London, being $11\frac{1}{4}$ guilders for £1, and at London on Montreal, $9\frac{1}{4}$ %, brokerage being $1\frac{1}{4}$ % for remitting from London?

10. The length of an iron cylindrical vessel with closed ends is 3 feet, and its outside circumference is 36 inches, the metal being an inch in thickness. Find its weight when filled with water, iron being $7\frac{1}{9}$ times heavier than water, and water $62\frac{1}{2}$ lbs. per cubic foot.

(No. 6.)

Education Department, Ontario.

JULY EXAMINATIONS, 1877.

SECOND CLASS TEACHERS AND INTERMEDIATE.

HISTORY.

TIME—TWO HOURS AND A HALF.

Examiner: S. ARTHUR MARLING, M.A.

N.B.—Marks will be deducted for bad spelling, and added for excellence in style.

1. From what existing circumstances would you infer the several invasions of Britain?
2. Narrate in a concise form the events which led to the Revolution of 1688.
3. Write short explanatory notes on Magna Charta, the East India Company, the Petition of Right, the Treaty of Limerick.
4. Name the great writers who adorned the reign of Elizabeth, and give a list of the works of any two of them except Shakespeare.
5. Enumerate the principal inventions and discoveries which have contributed to develop the commercial and industrial progress of Great Britain in modern times. Give the dates of these, and the names of the chief persons connected with them.

[OVER.]

6. Define the position of the following places, and connect them with important events and dates in English History :—Agincourt, Naseby, Utrecht, Plassey, Saratoga, Trafalgar, Fontainebleau.

7. When did these persons live, and for what are they noted in history : Thomas à Becket, the Black Prince, Chief Justice Gascoigne, Judge Jeffries, Admiral Robert Blake ?

8. Name the principal events of the history of Canada in the period 1700–1750.

9. Give some account of Porsena and Coriolanus.

10. Sketch briefly the course of the first Punic war.

(No. 7.)

Education Department, Ontario.

JULY EXAMINATIONS, 1877.

SECOND CLASS TEACHERS AND INTERMEDIATE.

ALGEBRA.

TIME—TWO HOURS AND A HALF.

Examiner : J. A. McLELLAN, LL.D.

NOTE.—Nine Questions will be considered a full Paper.

1. Prove $x^m \div x^n = x^{m-n}$.

(1.) Simplify $(a+b+c)^3 - 3(a+b+c)c^2 + 3(a+b+c)c^2 - c^3$.

(2.) Divide $1 - 3xy - y^3 - x^3$ by $1 - x - y$.

2. Prove the rule for finding the L. C. M. of two quantities. Find the L. C. M. of—

(1.) $x^3 + 6x^2 + 11x + 6$, $x^3 + 6x^2 - 25x + 150$.

(2.) $a^3 + b^3 + c^3 - 3abc$, $(a+b)^2 + 2(a+b)c + c^2$.

3. Prove $\frac{a}{b} \times \frac{c}{d} = \frac{ac}{bd}$.

Simplify $\left(\frac{1-x^2}{1-x^3} + \frac{1-x}{1-x+x^2}\right) \div \left(\frac{1+x}{1+x+x^2} - \frac{1-x^2}{1+x^3}\right)$.

4. Reduce to their lowest terms $\frac{a^{3m} + a^{2m} - 2}{a^{2m} + a^m - 2}$, and

$$\frac{a(a+2b) + b(b+2c) + c(c+2a)}{a^2 - b^2 - c^2 - 2bc}.$$

[OVER.]

5. (1.) If $a^3 - pa^2 + qa - r = 0$, then $x^3 - px^2 + qx - r$ is exactly divisible by $x - a$.

(2.) Prove that $(a + b + c)(bc + ca + ab) - (b + c)(c + a)(a + b)$ is divisible by abc . Is there any other divisor?

6. If $x = \left(\frac{a+b}{a-b}\right)^{\frac{2mn}{n-m}}$, then $\frac{1}{2} \frac{a^2 - b^2}{a^2 + b^2} (\sqrt[n]{x} + \sqrt[m]{x}) = \left(\frac{a+b}{a-b}\right)^{\frac{m+n}{n-m}}$

7. Solve the equations—

$$(1.) \frac{3-2x}{1-2x} - \frac{5-2x}{7-2x} = 1 - \frac{4x^2-2}{7-16x+4x^2}.$$

$$(2.) 3x - 2y = 5z - 6y = 7x - 4z = 1.$$

$$*(3.) \frac{x+3}{x+4} - \frac{x+1}{x+2} = \frac{4x+9}{2x+7} - \frac{12x+17}{6x+16}.$$

8. A person going at the rate of p miles an hour, and desiring to reach home by a certain time, finds, when he has still r miles to go, that, if he were continuing to travel at the same rate, he would be q hours too late. How much must he increase his speed to reach home in time?

9. Of the three digits comprising a number, the second is double of the third; the sum of the first and third is 9, and the sum of the three digits is 17. Find the number.

10. A. owes B. \$ a due m months hence, and also \$ b due n months hence. Find the equation which determines the time at which both sums could be paid at once, reckoning interest at 5 per cent. per annum.

* Candidates for 2nd Class Certificates may omit this equation.

Education Department, Ontario.

JULY EXAMINATIONS, 1877.

SECOND CLASS TEACHERS AND INTERMEDIATE.

(No. 8.)

BOOK-KEEPING

TIME—ONE HOUR AND A QUARTER.

Examiner : J. J. TILLEY.

1. In making out statements of "Resources and Liabilities" and "Losses and Gains," in which statement would you place each of the following accounts?—Note particularly any that you would place in both statements, with reasons:—

Cash, Mdse., Bank Stock, Expense, Real Estate, Rent, Shipment to A., A.'s Consignment.

2. Journalize, giving A.'s, B.'s and C.'s entries. (ruling not required on the paper).

July 1st. A. has this day discounted his note favour of B.,
(a) giving a cheque on the Bank for \$300, an order on C. for \$100, cash for balance. Face of note \$600, discount allowed \$30.

(b) A. shipped to B. \$1,500 worth of goods, to be sold on account and risk of A. He takes \$800 worth from his storehouse, and buys \$700 worth from C., giving C. a cheque on the Bank in full. On sending the goods away, A. had them insured at $1\frac{1}{8}\%$ on four-fifths of their value, paying premium in cash; and, on receiving the goods, B. paid freight, &c., per cheque \$80.

[OVER.]

(c) B. sold to C. \$800 worth of goods from A.'s consignment, receiving in payment C.'s note at 3 mos. for \$400—note to bear interest at 7 % per annum—a sight draft on A. for \$200, which A. honours, and a cheque on Bank for balance.

(d) A. lost a \$10 Bank Bill. Three days after, B. having found the Bill, returned it to A., and received \$1.50 for his trouble.

3. Give Day-Book entries for the following:—

(a)	Bank Dr.	\$800.	
	To A. B.		\$450
	" Bills Rec.		350
(b)	Bills Payable Dr.	\$400	
	Interest "		50
	Expense "		100
	To Bank.		\$250
	" A. B.		300
(c)	A. B. Dr.	\$300	
	To Mdse.		\$250
	" Expense		50
(d)	Cash Dr.	\$800	
	Bills Payable "		200
	To Good Will.		\$600
	" Bills Rec.		400

4. Post all the items in No. 3, and make out a Trial Balance. How far is a Trial Balance a test of correct work? Illustrate your answer by reference to yours. Discuss the possibility of results as shown by your Trial Balance.

Education Department, Ontario.

JULY EXAMINATIONS, 1877.

SECOND CLASS TEACHERS AND INTERMEDIATE.

(No. 9.)

NATURAL PHILOSOPHY.

TIME--TWO HOURS AND A HALF.

Examiner: J. A. McLELLAN, LL.D.

1. State the triangle of forces.

A weight of 100 lbs. is suspended by two flexible strings, one of which is horizontal, and the other inclined at an angle of 60° to the vertical; what is the tension of each string?

2. Show how a force can be resolved into two components at right angles to each other.

Show by a diagram how it is possible for a sailing vessel to make headway in a direction at an angle of 60° with that of the wind.

3. What is meant by the moment of a force with respect to a given point? State the principle of moments. The whole length of each oar of a boat is 10 feet, and from the hand to the rowlock the distance is 2 feet; each of your men sitting in the boat pulls his oar with a force of 60 lbs.; supposing the blades of the oar not to move through the water, find the resultant force propelling the boat.

4. A beam, the weight of which is 120 lbs., acting at a point one-fourth of its length from the foot is made to rest inclined at an angle of 45° against a smooth vertical wall (the other end resting on the ground) by a horizontal force applied to the foot: find this force.

[OVER.]

5. Define centre of gravity, and show how the centre of gravity of a body may be experimentally determined.

A uniform triangular slab of marble weighing 120 lbs. is supported by three men at its angular points: find the weight supported by each man.

6. In a system of pulleys in which each pulley hangs by a separate string, there are three pulleys of equal weight; the weight attached to the lowest is 32 lbs., and the power is 11 lbs.: find the weight of each pulley.

7. Explain the principle of virtual velocities, and apply it to find the relation between the power and the weight in a lever of the second order.

8. Define specific gravity. A cylinder whose s. g. is $\cdot 6$ floats in a fluid with $\frac{3}{5}$ of its bulk below the surface: find the s. g. of the fluid.

9. Describe the *forcing pump*.

The forcing pump being used to raise alcohol (s. g. = $\cdot 9$) from a lower to a higher level, determine the number of feet which the distance between the lower valve and the surface of the fluid must not exceed, in order that the pump may act, supposing the barometer to stand at 30 inches and the s. g. of mercury to be 13.5.

10. Describe the syphon and explain the principle on which it acts.

Water is flowing out of a vessel through a syphon; what would take place if the pressure of the atmosphere were removed and afterwards restored. (1) when the lower end of the syphon is immersed in water, (2) when it is not?

(No. 10.)

Education Department, Ontario.

JULY EXAMINATIONS, 1877.

INTERMEDIATE.

L A T I N.

TIME—THREE HOURS.

Examiner: S. A. MARLING, M.A.

A.—CÆSAR, de Bello Gallico, B. V.

Translate:

(a.) Hominum est infinita multitudo, creberrimaque ædificia, fere *Gallicis* consimilia: pecorum magnus numerus. Utuntur aut ære, aut taleis ferreis, ad certum pondus examinatis, pro nummo. Nascitur ibi plumbum album in mediterraneis regionibus, in maritimis ferrum; sed ejus exigua est copia; ære utuntur importato. Materia cujusque generis, ut in Gallia, est præter fagum atque abietem. *Leporem*, et gallinam, et anserem gustare *fas* non putant; hæc tamen alunt animi voluptatisque *causa*.

(b.) Cæsar, consilio ejus probato, etsi opinione trium legionum dejectus ad duas redierat, tamen unum communis salutis auxilium in celeritate ponebat. Venit magnis itineribus in Nerviorum fines. Ibi ex captivis cognoscit, quæ apud Ciceronem gerantur, quantoque in periculo res sit. Tum cuidam ex equitibus Gallis magnis præmiis persuadet, uti ad Ciceronem epistolam deferat. Hanc Græcis conscriptam literis mittit, ne, intercepta epistola, nostra ab hostibus consilia cognoscantur. Si adire non possit, monet, ut tragulam cum epistola, ad amentum deligata, intra munitiones castrorum adjiciat. In literis scribit, se cum legionibus profectum celeriter affore; hortatur, ut pristinam virtutem retineat.

[OVER.]

(1.) Show what influence Cæsar's campaigns in Gaul had upon his subsequent career. Give some account of the political state of Rome at this period.

(2.) Parse the italicized words in extract (a), giving the rules for the several cases employed.

(3.) *Etsi* to *redierat*—explain the meaning.

(4.) *Quæ apud Ciceronem gerantur*. Describe the situation of Cicero. Tell briefly what you know of any other person of this name

(5.) Mark the quantity of the penult. in *infinita*, *maritimis*, *abietem*, *affore*, *pristinam*, *captivis*.

(6.) Distinguish *lepōrem* and *lepōrem*, *consilium* and *concilium*, *anima* and *animus*.

(7.) Parse *redierat*, *cognoscit*, *profectum*, giving the principal parts.

(8.) Give the rules for the different subjunctives in extract (b).

B. VIRGIL, *Æneid*, B. ii.

Translate :

(a.) Pars stupet innuptæ donum exitiale Minervæ,
Et molem mirantur equi : primusque Thymoetes
Duci intra muros hortatur et arce locari,
Sive dolo, seu jam Trojæ sic fata ferebant.

Parse : *Minervæ*, *duci*, *arce*.

(b.) Hanc pro Palladio moniti, pro numine læso,
Effigiem statuere, nefas quæ triste piaret.
Hanc tamen immensam Calchas attollere molem
Roboribus textis cæloque educere jussit,
Ne recipi portis aut duci in mœnia possit.
Neu populum antiqua sub religione tueri.
Nam si vestra manus violasset dona Minervæ,
Tum magnum exitium (quod di prius omen in ipsum
Convertant !) Priami imperio Phrygibusque futurum ;
Sin manibus vestris vestram ascendisset in urbem,
Ultro Asiam magno Pelopea ad mœnia bello
Venturam, et nostros ea fata manere nepotes.

- (1.) *Possit, manere*—what peculiarity in the employment of these forms here?
- (2.) *Tamen*—what is the force of the word?
- (3.) *Cælo, Asiam*—explain the constructions.
- (4.) *Palladio, Pelopea, Asiam*—write short explanatory notes on these names.
- (5.) Decline in both numbers *roboribus, cælo, di*.
- (6.) What is the derivation of *effigiem, immensam, Priami, fata*?
- (7.) Write a short life of Virgil, and tell what you know of his other poems besides the *Æneid*.
- (8.) Scan the four verses in extract (a), and give the rules for the quantity of final *e* and *i*.

C. Translation into Latin.

(1.) Give example from Cæsar of (a) the accusative of specification; (b) the ablative absolute; (c) the impersonal use of the passive voice.

(2.) Translate into Latin (a) “Dumnorix began to return home without the knowledge of Cæsar. (b) All the vessels reached Britain about noon. (c) I am not a man to be alarmed by the danger of death. (d) This side extends about five hundred miles. (e) This letter having been brought in about midnight, the general informs his men, and inspires them with courage for the fight; on the morrow at day-break he shifts his camp, and, having gone about four miles, he descries the host of the enemy on the other side of a large ravine and a river. It was a matter of serious risk to engage with such a force in an unfavourable position.”

Note. The order of the Latin words below is not to be changed.

Qui litera circiter medius nox legatus affero suus facio certus, isque ad dimico animus confirmo: posterus dies lux primus moveo castrum, et circiter mille passus quatuor progredior trans vallis magnus et rivus multitudo hostis conspicio. Sum magnus periculum res cum tantus copia iniquus locus dimico.

(No. 11.)

Education Department. Ontario.

JULY EXAMINATIONS, 1877.

INTERMEDIATE.

FRENCH.

TIME—THREE HOURS.

Examiner : S. A. MARLING, M.A.

A.—VOLTAIRE : HISTOIRE DE CHARLES XII. LIV. VI.

Translate :

Le sérail était alors plus rempli que jamais d'intrigues et de factions. Ces cabales que l'on *voit*, dans toutes les cours, et qui se terminent d'ordinaire dans les nôtres par quelque déplacement de ministre, ou tout au plus par quelque exil, *font* toujours tomber à Constantinople plus d'une tête ; il en coûta la vie à l'ancien vizir Chourlouli et à Osman, ce lieutenant de Baltagi-Mehemet, qui était le principal auteur de la paix de Pruth, et qui, depuis cette paix, avait *obtenu* une charge considérable à la Porte. On trouva parmi les trésors d'Osman la bague de la czarine, et vingt mille pièces d'or au coin de Saxe et de Moscovie ; ce *fut* une preuve que l'argent seul avait tiré le czar du précipice, et avait ruiné la fortune de Charles XII. Le vizir fut relégué dans l'île de Lemnos, où il *mourut* trois ans après. Le Sultan ne *saisit* son bien ni à son exil ni à sa mort : il n'était *pas riche*, et sa pauvreté *justifia* sa mémoire.

[OVER.]

1. Parse the italicized verbs in the extract, and give the present and past participles, the third person singular present subjunctive, and the first person plural present indicative, of each of them.

2. Write short explanatory notes on “la czarine,” “la paix de Pruth,” “La Porte,” “avait tiré le czar du précipice,” “sa pauvreté justifia sa mémoire.”

3. “Dans les nôtres”—What is meant?

4. “Il en coûta la vie”—Explain the construction.

5. Tell briefly what you know of “les janissaires.”

B.—DE FIVAS : INTRODUCTION.

Translate :

(a) En vain Sir Thomas m'assura qu'il n'y avait aucun mal ; je vis l'encre couler à grands flots d'une table de marqueterie sur le tapis de Perse, et sachant à peine ce que je faisais, j'essayai d'en arrêter le progrès avec mon mouchoir de batiste.

(b) J'étais sans doute ridicule, mais j'avais l'air timide et mal à mon aise. N'auraient-ils pas dû me plaindre et m'excuser ? La place était toujours prise, et bientôt je fus entièrement délaissée par tous les danseurs. Il faisait dans la salle un chaud si insupportable, que, quoique immobile sur ma banquette, j'étais en nage.
“Quoique immobile”—Supply the ellipsis.

C.—GRAMMATICAL QUESTIONS.

1. Form the plural of *sou*, *cou*, *détail*, *bal*, *cercueil*, *canal*, *bleu*, *eau*.

2. Give sentences to shew the different ways in which *leur* is employed.

3. When must *I* be translated by *je* ? and when by *moi* ?

4. Give sentences to illustrate the French for the different meanings of “that.”

5. In what different ways is *quelque* written ? Give examples.

6. Write the second person plural preterite indicative, the first person plural present indicative, the present participle and the past participle of *plaindre*, *écrire*, *s'asseoir*, *appeler*, *devoir*, *savoir*, *comprendre*.

7. Apply the necessary rules to the following examples :—

(a.) Voici les maisons qu'elle a *acheter*.

(b.) Ce sont les deux livres de noix que j'ai *apporter* chez moi.

(c.) C'est la chanson que nous avons *entendre* chanter hier soir.

(d.) Voilà la cantatrice que nous avons *entendre* chanter.

D. Composition.

1. Translate into French :—

1. Do you think she is right ?

2. I hardly think your brother will come.

3. Though he has done it pretty well, it must be done over again.

4. That is the most learned man I know.

5. Rise early if you would grow rich or conquer an enemy.

2. Give in French the substance of any story you may have read.

(No. 12.)

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JULY EXAMINATIONS, 1877.

INTERMEDIATE.

GERMAN.

TIME—THREE HOURS.

Examiner : J. M. BUCHAN, M.A.

Translate into English:

„Wo ist denn die Marie, unser Kind?“ fragte der Vater. „Sie spielt draußen auf dem grünen Plaze,“ antwortete die Mutter, „mit dem Sohne unsers Nachbars.“—„Daß sie sich nur nicht verlaufen,“ sagte der Vater besorgt; „sie sind unbesonnen.“

Die Mutter sah nach den Kleinen und brachte ihnen ihr Vesperbrod. „Es ist heiß,“ sagte der Bursche; und das kleine Mädchen langte begierig nach den Kirschen. „Seid nur vorsichtig, Kinder,“ sprach die Mutter; „lauft nicht zu weit vom Hause, oder in den Wald hinein; ich und der Vater gehen aufs Feld hinaus.“ Der junge Andres antwortete: „O, seid ohne Sorge, denn vor dem Walde fürchten wir uns; wir bleiben hier beim Hause sitzen, wo Menschen in der Nähe sind.“

LUDWIG TIECK.

„Ich singe, wie der Vogel singt,
Der in den Zweigen wohnt;
Das Lied, das aus der Kehle dringt,
Ist Lohn, der reichlich lohnt.
Doch darf ich bitten, bitt ich eins:
Laßt mir den besten Becher Weins
In purem Golde reichen.“

(OVER)

Er setzt' ihn an, er trank ihn aus;
 „D Trank voll süßer Labe!
 D wohl dem hochbeglückten Haus,
 Wo das ist kleine Gabe!
 Ergeht's euch wohl, so denkt an mich,
 Und danket Gott so warm, als ich
 Für diesen Trunk euch danke.“

GOETHE.

1. Decline through both numbers:

die Marie,	das kleine Mädchen,
unser Kind,	kleine Gabe,
die Mutter,	ihr Vesperbrod.

2. Distinguish das from daß, Trank from Trunk, der Band from das Band, die Thoren from die Thore, setzen from sitzen, Mensch from Mann, Gold from Geld.

3. Write down all the persons in both numbers of the present indicative active of sehen, bitten, sprechen, dürfen, denken, laufen, and singen, and give in addition the principal parts of these verbs.

4. Darf ich bitten, ergeht's euch wohl. Introduce the suppressed conjunction into these expressions, and make all the other changes which that may render necessary.

5. Write down the plural of

der Kaufmann,	der Nachbar,
der Vater,	der Bursche,
die Tochter,	der Wald,
das Buch,	das Feld,
der Kopf,	der Vogel,
die Schule,	die Kehle,
das Ohr,	das Lied,
die Frau,	der Becher,
das Haus,	der Gott.
der Sohn,	

6. Prefix the proper form of the article der, die, das, to

Großmuth,	Zweig,
Rühnheit,	Lohn,
Feder,	Wein,
Ufer,	Gold,
Christenthum,	Trank,
Platz,	Labe.
Sorge,	

Translate into German:

(a) What sort of trees are in the garden?

I have no more wine.

Has he any more bread?

I do not wish to go home.

I have a horse that is very strong.

* * The German words to be used in the next exercise will be found below arranged in the German order.

(b) One day a Frenchman rode up to a bridge which was so narrow that two horsemen could scarcely turn out for each other on it. An Englishman came upon the opposite end of it at the same time, and when both reached the middle, neither would make room for the other.

Ein Franzose reiten ein Tag auf ein Brücke zu, der so schmal sein, daß zwei Reiter einander kaum darauf ausweichen können. Ein Engländer betreten zugleich der entgegengesetzten Ende derselbe, und als Beide auf die Mitte sein, willen Keiner der Ander Platz machen.

(c) "Shepherd," said the old wolf, "thou callest me a blood-thirsty robber, which, however, I am not in reality."

(No. 13.)

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JULY EXAMINATIONS, 1877.

SECOND CLASS TEACHERS AND INTERMEDIATE.

EUCLID.

TIME—TWO HOURS AND A HALF.

Examiner—J. C. GLASHAN.

N.B.—*Algebraic symbols must not be used. Candidates who take Book II. will omit Questions 1, 2 and 6, marked thus * ; Candidates who take only Book I, will omit Questions 7, 8 and 9.*

*1. (a.) Which of the axioms in Euclid relate to geometrical magnitudes only ?

(b.) There are four cases in which Euclid proves two triangles to be equal in all respects, what are they ? Enunciate the omitted case of equality.

*2. To draw a straight line perpendicular to a given straight line of unlimited length from a given point without it.

A straight line drawn perpendicular to the base of an isosceles triangle through the middle point of the base, will pass through the vertex.

3. Any two sides of a triangle are together greater than the third side.

The straight line which joins the vertex of a triangle to the middle point of the base is less than half the sum of the two sides.

4. If a straight line falling upon two other straight lines make the exterior angle equal to the interior and opposite angle upon the same side of the line, the two straight lines shall be parallel to one another.

If two straight lines be either parallel or perpendicular to two other straight lines, each to each, the first pair make the same angles with one another, as the second pair.

[OVER.]

5. Parallelograms and triangles upon the same base and between the same parallels are equal.

D, E, F, are the middle points of the sides of a triangle ABC and through A, B, C are drawn three parallel straight lines meeting EF, FD, DE, in a , b , c respectively, prove that the triangle ABC is double of the triangle abc , and that bc passes through A, ca through B, and ab through C.

*6. In any right-angled triangle, the square which is described on the side subtending the right angle is equal to the squares described on the sides which contain the right angle.

If upon the sides AB, AC of any triangle ABC, there be described any parallelograms ABGF and ACED, if the sides GF and ED meet in H, and HA be joined, and if finally upon the third side BC of the triangle a parallelogram BCMN be described whose side BN is equal and parallel to HA, then shall the parallelogram BCMN be equal to the parallelograms ABGF and ACED together. (*Pappus.*)

7. If a straight line be divided into any two parts, the squares on the whole line and on one of the parts are equal to twice the rectangle contained by the whole line and that part together with the square on the other part.

Produce a given straight line so that the sum of the squares on the given line and the part produced shall be equal to twice the rectangle contained by the whole line thus produced and the part produced.

8. If a straight line be divided into two equal and also into two unequal parts, the squares on the two unequal parts are together double of the square on half the line and of the rectangle contained by the whole line and the part between the points of section.

Divide a given straight line into two parts such that the square on one of them may be double of the square on the other.

9. To divide a given straight line into two parts so that the rectangle contained by the whole line and one of the parts shall be equal to the square on the other part. (*The golden section.*)

To produce a given straight line to a point such that the rectangle contained by the whole line thus produced and the part produced shall be equal to the square on the given straight line.

(No. 14.)

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JULY EXAMINATIONS, 1877.

SECOND CLASS TEACHERS AND INTERMEDIATE

COMPOSITION.

TIME—AN HOUR AND A QUARTER.

Examiner : J. M. BUCHAN, M.A.

Candidates may select any one of the following topics:—

The education that is given outside of the school-room.

The great North-West.

“ All the world ’s a stage,
And all the men and women merely players.”

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JULY EXAMINATIONS, 1877.

SECOND CLASS TEACHERS AND INTERMEDIATE.

(No. 15.)

CHEMISTRY.

TIME—ONE HOUR.

Examiner—J. A. McLELLAN, LL.D.

1. Give two methods of preparing Hydrogen. By what experiments would you show its most important properties?
2. How would you prepare Nitric Acid? Describe any experiments with Nitric Acid which you have seen.
3. State the different forms in which Carbon occurs in nature. Port wine filtered through charcoal is deprived of its color; give the reasons of this. How is charcoal used as a disinfectant? Give the theory of its action.
4. How would you prepare Carbonic Acid from Chalk and Sulphuric Acid? Express the reaction by an equation. Bread is raised by the liberation of Carbonic Acid. Explain.
5. What is meant by combustion? Explain fully the substances formed when a candle is burned (1) in oxygen, (2) in a limited supply of air.
6. Write down the formulæ and molecular weights of water, ammonia, hydrochloric acid, sulphuric acid, ferrous sulphate, phosphoric acid.
7. (1) How many grams of oxygen are required to burn 24 grams of carbon and 32 grams of sulphur?
(2) How many lbs. of zinc are there in 350 lbs. of zinc sulphate?
8. Describe any two experiments which you have performed yourself, and the purpose for which you performed them.
9. How would you obtain chlorine from common salt? Give the equation respecting the reaction. Describe any experiments with chlorine you may have seen.

